

## CLAIMS

1. A friction hinge comprising:

a rotatable shaft;

5 a band having a circular spring portion which defines an opening in which said shaft is rotatably inserted therewithin for providing frictional torque between said shaft and said spring portion of said band, said band further including tail portion having at least one edge;

a reinforcing rib disposed against said at least one edge of said band tail  
10 portion in response to said shaft being fully inserted within said spring portion opening, said rib preventing flexing of said tail portion when said spring portion of said band rotates relative said shaft; and

a means for preventing movement of said reinforcing rib away from said at  
least one edge of said tail portion even if said shaft is at least partially retracted from  
15 within said spring portion opening.

2. The hinge of claim 1, wherein said preventing means comprises at least one engaging tab depending from said at least one edge of said band tail portion and designed for grabbing a portion of said rib.

3. The hinge of claim 2, wherein said rib is formed with at least one slot through  
20 which said tab is selectively received.

4. The hinge of claim 3, wherein said at least one tab is formed with a hook element for abutting against a portion of said rib once said tab is received through said at least one slot.

5. The hinge of claim 4, wherein said rib is further formed with an opening  
25 through which said shaft passes therethrough when inserted within said opening of said band spring portion.

6. The hinge of claim 5, wherein said opening of said rib and said opening of said spring portion are in a first unaligned condition when said at least one tab is received through said at least one slot.

7. The hinge of claim 6, wherein said opening of said rib and said opening of said spring portion are in a second aligned condition when said hook element of said at least one tab is positioned to abut against a portion of said rib.

8. The hinge of claim 7, wherein said rib is movable relative to the said band  
5 between said first and second positions in a direction corresponding to said tail portion edge.

9. For a friction hinge which includes a rotatable shaft and a band having a circular spring portion which defines an opening in which said shaft is rotatably inserted therewithin for providing frictional torque between said shaft and said spring portion of  
10 said band, said band also having a tail portion with at least one running edge, a method for preventing flexing of said tail portion of said band when said spring portion of said band rotates relative to said shaft, the method comprising the steps of:

positioning a reinforcing rib that is formed with an opening through which said shaft can pass against said at least one edge of said band tail portion;

15 passing an engaging tab which depends from said at least one edge of said band tail portion through a corresponding slot formed in said rib;

adjusting the relative positions of said reinforcing rib and said band in order that said tab abuts a portion of said rib with said opening of said rib and said opening of said band spring portion being in an aligned condition; and

20 inserting said shaft through said aligned rib and said spring portion openings in order to lock said reinforcing rib in position against said at least one edge of said band.

10. A friction hinge comprising:

a rotatable shaft;

25 a band defined by a spring portion having an opening in which the shaft is rotatably inserted therewithin for providing frictional torque between said shaft and said band spring portion, said band also including a tail portion depending from said spring portion and having at least one edge; and

a reinforcing rib locked in position against said at least one edge of said  
30 band tail portion for preventing flexing of said tail portion when said spring portion of

said band rotates relative said shaft even if said shaft becomes partially retracted from within said spring portion opening.

11. The hinge of claim 10, wherein said rib is formed with a slot through which an engaging tab that extends from said band tail portion is insertable.

5        12. The hinge of claim 11, wherein said tab of said tail portion abuts a portion of said rib adjacent said slot after insertion therewithin in response to an adjustment in position of said rib relative said band tail portion.

10        13. The hinge of claim 12, wherein said rib is formed with an opening which is designed to be aligned with said spring portion opening when said tab of said tail portion abuts a portion of said rib adjacent said slot after insertion therewithin.

14. The hinge of claim 13, wherein said aligned rib and spring portion openings have said shaft received therethrough.